

Work list for implementing a minimal system to bring clean liquid into Bo.

- Extension of LAr transfer line from Luke to Bo.
- Install LAr fill isolation valve and bypass valve at Bo.
- Create safety documentation for and perform pressure test of LAr transfer line.
- Install ASME relief valve. Pressure test in calibration shop and helium leak check prior to installation.
- Fabricate relief valve vent line that runs from Bo to outside PAB. This must be a ~3 inch ID.
- Install GAr purge for exhaust of ASME relief valve.
- Install rupture disc.
- Install vacuum insulated flex hose argon vent line that runs from Bo to the LAr vaporizer.
- Install LAr drain isolation valve.
- Install argon vapor vent valve. This valve will be used to vent the boil off when the cryostat is full and vent vapor while filling.
- Install vacuum pump to pump on large flange double o-ring seal.
- Fix failed temperature element in heater used for emptying cryostat.
- Install absolute pressure transmitter and wire to PLC (not required).
- Wire level probe to PLC (not required).
- Update flow schematic to accurately represent Bo.
- Update system description
- Update instrument and valve summary
- Update procedures
- Update FMEA
- Update What-If
- Update ODH
- Write pressure vessel engineering note for BO
- Update relief valve documentation
- Update material stress documentation – TPC feed thru
- Safety review